



**Figure 7.—Sonic Flow Choking**

**Subpart F—Manufacturer  
Production Line Testing Program**

**§ 91.501 Applicability.**

(a) The requirements of this subpart F are applicable to all marine spark-ignition engines subject to the provisions of subpart A of this part 91.

(1) This subpart F applies to marine spark-ignition outboard engines beginning with model year 1999.

(2) This subpart F applies to marine spark-ignition personal watercraft engines beginning with model year 2000.

(b) The Administrator may waive the provisions of this subpart for a manufacturer or a specific engine family, as

specified in paragraphs (b) (1), (2) and (3) of this section.

(1) The provisions of this subpart are waived for existing technology OB/PWC through model year 2003.

(2) Upon request by a manufacturer, the Administrator may waive the provisions of this subpart for existing technology OB/PWC for a specific engine family through model year 2005 if the Administrator determines that the engine family will be phased out of production for sale in the U.S. by the end of model year 2005. As a condition to receiving such a waiver for either model year 2004, 2005 or both, the manufacturer must discontinue production of engines for sale in the U.S. according to a schedule determined by the Administrator upon granting this waiver. Failure to do so by the manufacturer will void *ab initio* the applicable certificate of conformity.

(3) A manufacturer request under paragraph (b)(2) of this section must be in writing and apply to a specific engine family. The request must identify the engine family designation, a written rationale supporting the FEL choice, the type of information used as a basis for the FEL (e.g., previous emission tests, development tests), the specific source of the information including when the information was generated, the requested schedule for phasing the engine family out of production, and any other information the Administrator may require.

[61 FR 52102, Oct. 4, 1996, as amended at 62 FR 15808, Apr. 2, 1997]

**§ 91.502 Definitions.**

The definitions in subpart A of this part apply to this subpart. The following definitions also apply to this subpart.

*Configuration* means any subclassification of an engine family which can be described on the basis of gross power, emission control system, governed speed, injector size, engine calibration, and other parameters as designated by the Administrator.

*Test sample* means the collection of engines selected from the population of an engine family for emission testing.

**§ 91.503 Production line testing by the manufacturer.**

(a) Manufacturers of marine SI engines shall test production line engines from each engine family according to the provisions of this subpart.

(b) Production line engines must be tested using the test procedure specified in subpart E of this part that was used in certification unless an alternate procedure is approved by the Administrator. Any adjustable engine parameter must be set to values or positions that are within the range recommended to the ultimate purchaser, unless otherwise specified by the Administrator. The Administrator may specify values within or without the range recommended to the ultimate purchaser.

**§ 91.504 Maintenance of records; submittal of information.**

(a) The manufacturer of any new marine SI engine subject to any of the provisions of this subpart must establish, maintain, and retain the following adequately organized and indexed records:

(1) *General records.* A description of all equipment used to test engines in accordance with § 91.503. Subpart D of this part sets forth relevant equipment requirements in §§ 91.306, 91.308, 91.309, and 91.313.

(2) *Individual records.* These records pertain to each production line test conducted pursuant to this subpart and include:

(i) The date, time, and location of each test;

(ii) The number of hours of service accumulated on the test engine when the test began and ended;

(iii) The names of all supervisory personnel involved in the conduct of the production line test;

(iv) A record and description of any adjustment, repair, preparation or modification performed prior to and/or subsequent to approval by the Administrator pursuant to § 91.507(b)(1), giving the date, associated time, justification, name(s) of the authorizing personnel, and names of all supervisory personnel responsible for the conduct of the repair;

(v) If applicable, the date the engine was shipped from the assembly plant,